

Status of FFAG monograph

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http://hadron.kek.jp/~machida/doc/nufact/ffag/machida_20060516.ppt & [pdf](http://hadron.kek.jp/~machida/doc/nufact/ffag/machida_20060516.pdf)

Idea

- At the last FFAG workshop in Osaka, writing a monograph on recent FFAG development was proposed.
- Idea is the following.
 - There have been many activities since late 1990s on FFAG: scaling, non-scaling, isochronous, etc.
 - Need introduction to new comers.
 - Claim that we are the main body of development.
- I was asked to compile the monograph.

Related activities

- New session on the book of Tigner and Chao.
- Review article on journals?

Status (1)

- Collection of references.
 - NIM article by Keil and Sessler gives a good list of reference, especially on non-scaling FFAG.
 - EPAC article by Mori gives a list of scaling reference, especially hardware developments.
 - As usual, PAC and EPAC proceedings are many collection of references.

Status (2)

- Background
 - Invention
 - MURA days
 - Between MURA and late 1990s
- Scaling FFAG in Japan
- New idea: Non-scaling and isochronous FFAG
- Applications

Question

- Is FFAG a “synchrotron”?
 - PR by Simon states clear “FFAG synchrotron”, “FFAG cyclotron”, and “FFAG betatron”.
 - Synchrotron is supposed to have variable magnetic field.